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## Appendix C – Shopping Information

The activities in *Afterschool Universe* are designed to utilize readily accessible materials – most items can be purchased at a supermarket, mass merchandiser, or craft store. A few items are a little more challenging to find, and this section provides detailed information about possible places to purchase them. Since this information can change quickly, you should consider these suggestions as a starting points only. Check our website for any updates to this.

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### **Session 3 – Telescopes**

The refracting telescope kits required for this session are distributed by Science First. They are available in single kits (to build one telescope) or sets of 10 kits. Bulk purchasing can be arranged directly with the company.

Items:

- 654-0010: Refracting Telescopes (set of 10)
- 654-0000: 1 Complete Telescope Kit

Science First  
95 Botsford Place  
Buffalo, NY 14216  
Phone: 800-875-3214  
Fax: 800-799-8115  
<http://www.sciencefirst.com/>

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### **Session 4 – Invisible Light**

Some of the components of the infrared-detecting circuit are available from RadioShack. Your local store may carry the parts, or you can buy them on the company's website.

Items:

- 278-1157: 24” Insulated Test/Jumper Leads (alligator clip cables)
- 277-1008: Mini Audio Amplifier (amplifier/speaker)
- 42-2434: 6-Ft. Shielded Cable, 1/8” Plug to Stripped Wires (audio cable)

RadioShack  
Phone: 800-THE-SHACK  
<http://www.radioshack.com>

The infrared receiver circuit requires an encapsulated solar cell with two wire lead. Our previous supplier for this item is no longer in business, but the item is still being produced by its manufacturer. Until we have verified a new supplier, we recommend that you check out the product information below, and do an internet search for this model, or a similar item. You can also check our website for any updated recommendations.

Items:

- SOL1: Encapsulated Solar Cell (0.5V/400mA)

Velleman, Inc.  
<http://www.vellemanusa.com/>

The ultraviolet light-reactive beads and portable UV light can be purchased from many educational retailers. One source is Educational Innovations, Inc.

Items:

- UV-AST: UV Beads, Assorted Colors
- UV-640: Portable UV Light

Educational Innovations, Inc.  
5 Francis J. Clarke Circle  
Bethel, CT 06801  
Phone: 203-229-0730  
Fax: 203-229-0740  
<http://www.teachersource.com>

Ultraviolet pens (which can also be called invisible ink pens or sometimes counterfeit marking pens) can be found in a number of places, but unfortunately, the specifics tend to fluctuate quickly. Try doing an online search to see what is available at the time that you need them.

## **Session 5 – Spectroscopy**

This session requires diffraction grating, a thin plastic film. This can be purchased from various science supply stores online. A couple options are listed below, and a quick internet search will likely turn up others. Purchase at least 1 square inch per spectroscope.

Items:

- PG-400: Single Axis Diffraction Grating (6" x 24" sheet)

Educational Innovations, Inc.  
5 Francis J. Clarke Circle  
Bethel, CT 06801  
Phone: 203-229-0730  
Fax: 203-229-0740  
<http://www.teachersource.com>

OR

Items:

- 3052116: Diffraction Grating Film (200' x 6" sheet)

Edmund Scientific  
60 Pearce Ave.  
Tonawanda, NY 14150  
Phone: 1-800-728-6999  
<http://www.scientificsonline.com>

OR

Items:

- 01505: Diffraction Grating Film Sheet – 500 lines per mm (6" x 12" sheet)

Rainbow Symphony Store  
6860 Canby Ave. Suite 120  
Reseda, CA 91335  
Phone: 818-708-8400  
Fax: 818-708-8470  
<http://www.rainbowsymphonystore.com>